Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-55. (Cancelled)

56. (Currently Amended) A method for detecting whether an interaction occurs between a polypeptide of a producer cell and a neutral amino acid transporter cell surface receptor of an indicator cell *ex vivo* or *in vitro*, wherein the polypeptide has a sequence selected from the group consisting of:

a sequence which ~~comprises~~ consists of amino acids 448-538 of SEQ ID NO:1, and

a sequence which has, for each series of 20 amino acids, at least 80% identity with 20 contiguous amino acids of amino acids 448-538 of SEQ ID NO:1, ~~and~~

~~a sequence which has a length of at least five amino acids and has complete identity with a corresponding length fragment of the cyt region of human endogenous retrovirus HERV-W envelope protein,~~

said method comprising:

contacting said indicator cell with said producer cell;

observing formation of syncytia between said producer cell and said indicator cell or non-formation of syncytia between said producer cell and said indicator cell; and

correlating said formation of syncytia with occurrence of an interaction between the polypeptide of the producer cell and the neutral amino acid transporter cell surface receptor of said indicator cell or correlating said non-formation of syncytia with a lack of an interaction between the polypeptide of the producer cell and the neutral amino acid transporter cell surface receptor of said indicator cell.

57. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide comprises five to twenty contiguous amino acids having complete identity with five to twenty contiguous amino acids of the cyt region of human endogenous retrovirus HERV-W envelope protein.

58. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide comprises ten to twenty contiguous amino acids having complete identity with ten to twenty contiguous amino acids of the cyt region of human endogenous retrovirus HERV-W envelope protein.

59. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide comprises the cyt region of human endogenous retrovirus HERV-W envelope protein.

60. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide consists of the cyt region of human endogenous retrovirus HERV-W envelope protein.

61. (Previously Presented) The method of claim 56, wherein said polypeptide has, for each series of twenty amino acids, at least 90% identity with twenty contiguous amino acids of the cyt region of human endogenous retrovirus HERV-W envelope protein or a fragment thereof.

62. (Previously Presented) The method of claim 56, wherein said polypeptide has, for each series of twenty amino acids, at least 95% identity with the cyt region of human endogenous retrovirus HERV-W envelope protein or a fragment thereof.

63. (Cancelled)

64. (Previously Presented) The method of claim 56, wherein said polypeptide consists of amino acids 448-538 of SEQ ID NO:1.

65. (Previously Presented) The method of claim 56, wherein said polypeptide has, for each series of twenty amino acids, at least 80% identity with twenty contiguous amino acids of amino acids 448-538 of SEQ ID NO:1.

66. (Previously Presented) The method of claim 56, wherein said polypeptide has, for each series of twenty amino acids, at least 90% identity with twenty contiguous amino acids of amino acids 448-538 of SEQ ID NO:1.

67. (Previously Presented) The method of claim 56, wherein said polypeptide has, for each series of twenty amino acids, at least 95% identity with twenty contiguous amino acids of amino acids 448-538 of SEQ ID NO:1.

68. (Cancelled)

69. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide consists of SEQ ID NO:1.

70. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide is a fragment of SEQ ID NO:1.

71. (Previously Presented) The method of claim 56, wherein said receptor is the hATB° receptor for type D mammalian retroviruses.

72. (Previously Presented) The method of claim 56, wherein said indicator cell is a cancer cell.

73. (Previously Presented) The method of claim 56, wherein said indicator cell is a cell of human origin.

74. (Previously Presented) The method of claim 56, wherein said method comprises correlating the formation of syncytia with expression of the polypeptide on the surface of the producer cell.

75. (Previously Presented) The method of claim 56, wherein said producer cell is selected from the group consisting of bone cells, muscle cells, placenta cells, endothelial cells, epithelial cells, glial cells, tumor cells, and cells derived from tumor cell lines.

76. (Previously Presented) The method of claim 56, wherein said producer cell is a cell from a blood vessel.

77. (Currently Amended) The method of claim ~~56~~ 90, wherein said polypeptide is encoded by the env gene of the HERV-W endogenous retrovirus.

78. (Currently Amended) The method of claim ~~56~~ 90, wherein a nucleic acid encoding said polypeptide is isolated from chromosome 7 of human DNA.

79. (Previously Presented) The method of claim 78, wherein said nucleic acid comprises U3RU5-gag-pol-env-U3RU5 and env-U3RU5.

80. (Previously Presented) The method of claim 78, wherein said nucleic acid is isolated using U6198 and L6186 primers.

81. (Previously Presented) The method of claim 78, wherein said nucleic acid is env-U3RU5 isolated using U6189 and L6186 primers.

82. (Previously Presented) The method of claim 78, wherein said nucleic acid is isolated from human DNA using a primer which overlaps with a zone where a retrovirus sequence, U3 upstream and U5 downstream, joins a contiguous nonretroviral flanking sequence.

83. (Currently Amended) The method of claim ~~56~~ 90, further comprising contacting said producer cells with medicinal substances, drugs or gene/prodrug systems and determining the effect of said medicinal substances, drugs or gene/prodrug systems on said formation or non-formation of syncytia.

84. (Previously Presented) The method of claim 56, further comprising obtaining said producer cell by transfecting a cell with a vector comprising a gene encoding said polypeptide and a promoter for expressing said polypeptide.

85. (Previously Presented) The method of claim 56, wherein said promoter is a heterologous promoter.

86. (Previously Presented) The method of claim 56, wherein said promoter is an autologous promoter.

87. (Currently Amended) The method of claim 56, wherein said receptor is hATB° and said polypeptide is selected from the group consisting of a polypeptide comprising the cyt region of HERV-W Env and a polypeptide ~~comprising~~ consisting of amino acids 448-538 of SEQ ID NO: 1.

88. (Previously Presented) The method of claim 56, wherein said contacting is conducted at a neutral pH.

89. (Previously Presented) The method of claim 83, further comprising selecting a medicinal substance, drugs or gene/prodrug system candidate based on occurrence of an interaction between the polypeptide of the producer cell and the neutral amino acid transporter cell surface receptor of said indicator cell.

90. (New) A method for detecting whether an interaction occurs between a polypeptide of a producer cell and a neutral amino acid transporter cell surface receptor of an indicator cell *ex vivo* or *in vitro*, wherein the polypeptide has a sequence selected from the group consisting of:

a sequence which consists of SEQ ID NO:1, and

a sequence which has a length of at least five amino acids and has complete identity with a corresponding length fragment of the cyt region of human endogenous retrovirus HERV-W envelope protein,

said method comprising:

contacting said indicator cell with said producer cell;

observing formation of syncytia between said producer cell and said indicator cell or non-formation of syncytia between said producer cell and said indicator cell; and

correlating said formation of syncytia with occurrence of an interaction between the polypeptide of the producer cell and the neutral amino acid transporter cell surface receptor of said indicator cell or correlating said non-formation of syncytia with a lack of an interaction

between the polypeptide of the producer cell and the neutral amino acid transporter cell surface receptor of said indicator cell.